



Australian Government

MEM10006 Install machine/plant

Release: 2

MEM10006 Install machine/plant

Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM10006 Install machine/plant (Release 1).

Release 1. Supersedes and is equivalent to MEM10006B Install machine/plant.

Application

This unit of competency defines the skills and knowledge required to install machine/plant where the equipment being installed requires substantial modification to the existing site and/or connecting equipment and excludes minor modifications.

Work is undertaken utilising new or existing external and internal locations and sites and foundations, footings, beds and frameworks are completed prior to installation and commissioning.

Installation covered by this unit also excludes electrical installation.

Where design skills are required see unit MEM09011 Apply basic engineering design concepts.

Where existing machines/plant are replaced by the same or similar machine/plant see unit MEM18006 Perform precision fitting of engineering components.

Where balancing skills or manufacture of gaskets is required see appropriate units.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12023	Perform engineering measurements
MEM12024	Perform computations
MEM13015	Work safely and effectively in manufacturing and engineering
MEM14006	Plan work activities
MEM16006	Organise and communicate information

MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations
MEM18003	Use tools for precision work
MEM18006	Perform precision fitting of engineering components
MEM18009	Perform precision levelling and alignment of machines and engineering components
MEM18055	Dismantle, replace and assemble engineering components

Competency Field

Installation and commissioning

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	Determine job requirements	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, drawings, job sheets or work instructions
2	Inspect and prepare installation site	2.1	Check site for correct location, dimension and levels utilising appropriate measuring equipment
		2.2	Report non-compliance with specification to appropriate authority
		2.3	Undertake alteration/correction with approval of appropriate authority
		2.4	Prepare all surfaces, materials and components for use

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

3	Install machine/plant	3.1	Ensure all work is carried out safely and in accordance with site procedures and to Australian Standards
		3.2	Prepare machine components for correct sequential installation
		3.3	Install machine/plant in accordance with manufacturers' and site specifications
		3.4	Undertake routine modifications/alterations according to procedures, where required
		3.5	Ensure machine/plant is levelled, aligned, coupled and connected (excluding electrical connections) in accordance with specifications
		3.6	Clean site and clear all debris and leave in safe state
		3.7	Ensure all reports and documentation is completed to required specifications

Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Machine/plant includes one (1) or more of the following:

- pumps
- blowers
- compressors
- drive units
- production equipment and plant
- process equipment

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- plant and machinery
- engineering plant
- machine tools

Routine modifications/alterations include one (1) or more of the following:

- fitting of spacers
- relocation of brackets
- alignment of holes

Unit Mapping Information

Release 2. Supersedes and is equivalent to MEM10006 Install machine/plant (Release 1).

Release 1. Supersedes and is equivalent to MEM10006B Install machine/plant.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>

Assessment Requirements for MEM10006 Install machine/plant

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications and drawings for installing machine/plant and confirming site is level utilising appropriate measuring equipment and all surfaces, materials and components are prepared in accordance with manufacturers' and site specifications
- installing machine/plant in accordance with specifications
- levelling, aligning, coupling and connecting machine/plant in accordance with specifications
- undertaking routine modifications/alterations in accordance with procedures, as required
- completing all reports and documentation to required specifications.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- installation specification of the machine/plant
- procedures to follow if the location, dimensions and/or levels of the site do not comply with the specifications
- procedures for checking whether the installed machine/plant conforms to specifications
- materials and components to be used in the installation of the machine/plant
- applicable codes and standards
- installation sequence
- methods to locate, fix/fasten machine/plant
- methods of lifting/moving machine/plant and components
- techniques, tools and equipment to measure site and machine/plant installation.

Assessment Conditions

- Assessors must:

- have vocational competency in installing machine and plant at least to the level being assessed with relevant industry knowledge and experience
- satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Assessment must occur in a functioning workplace. Where assessment in the workplace would be unsafe, impractical or threatens the environment, assessment must occur in a sufficiently rigorous simulated environment that reflects the circumstances that would be experienced in a functioning workplace. Assessment must cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

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